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- **Does harboring terrorism have economic costs?**
- **How persistent are the costs of harboring terrorism?**
- **How can civilians be discouraged to harbor terrorists?**

**Summary:** The literature on conflict and terrorism has paid little attention to the economic costs of terrorism for the perpetrators of terror attacks. Our research fills that gap by examining the economic costs of harboring suicide terror attacks. We combine data on Palestinian suicide terrorists with data from the Palestinian Labor Force Survey, to identify and quantify the impact of a successful attack on unemployment and wages. We find robust evidence that terror attacks have important economic costs. They cause a significant increase in unemployment and a significant decrease in wages and on the number of Palestinians working in Israel. Importantly, these effects are persistent and last for at least six months after the attack.

# POLICY BRIEFING

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## Does Harboring Terrorists Have Economic Costs?

### Introduction

One of the main goals of terrorism is to impose economic, psychological, sociological and political costs on the targeted society in order to coerce its government into granting political and territorial concessions. Although the success of terrorists in achieving this goal is still being debated (Gould and Klor, 2010), there is a growing body of empirical work showing that terror campaigns impose important economic costs on the targeted societies.

Most of the literature on the economic consequences of terrorism focuses on the economy of the targeted country. However, terrorism may also have unintended economic consequences on the economy of the society harboring the perpetrators of terror attacks. This is the focus of our study (Benmelech et al., 2010), which identifies and quantifies the effect of harboring terrorists on the local economy. In particular, we focus on the Palestinian economy and assess the impact of successful Palestinian suicide attacks against Israeli targets on Palestinian unemployment, wages and access of Palestinian workers to the more lucrative Israeli labor market.

By measuring the economic costs of terrorism to the harboring society, our study contributes to the literature on the economic costs of conflict. There are two main challenges in identifying the causal effect of terrorism on the harboring society. First, in a large number of conflicts plagued by terrorism, perpetrators and targeted population live side by side, making it difficult to obtain the appropriate data that

would allow researchers to disentangle the effect of terrorism on the perpetrators. This is certainly the case in conflicts that attracted a lot of the researchers' attention, like the ones in the Basque Country, Iraq and Afghanistan.

Second, even for those conflicts where the appropriate data are available, solid empirical evidence has yet to be produced. The lack of evidence based on these conflicts is perhaps due to the difficulty involved in identifying the causal effect of terror on economic outcomes. Alternatively, other factors, like political institutions and religious beliefs, may simultaneously affect economic conditions and the severity of terror.

### **Available Data**

Our analysis overcomes the difficulties mentioned above by relying on a detailed data set of suicide terror attacks and local economic conditions together with a unique empirical strategy. The available data set contains detailed information on all suicide attacks by Palestinians against Israeli targets in Israel, the West Bank and the Gaza Strip between September 2000 and December 2006, the period of the second Palestinian uprising. During this time period there were 143 suicide attacks carried out by 157 suicide terrorists for which we have the required information to be included in our analysis. These attacks combined resulted in 597 Israeli fatalities with over 4,040 citizens injured.

Not all suicide terrorists during the period at issue successfully reached their target and completed their mission. In fact, a large number of suicide terrorists in our data set failed in their missions and were caught or intercepted by security forces or civilians during the attack. All these terrorists are clearly identified in reports by Israeli Security Agency. Following these reports, we classify suicide terrorists as "stopped" or "caught" if they: i) failed to detonate their explosive devices, ii) looked suspicious and were apprehended or killed by civilians, policemen or soldiers, before they were able to activate their explosives, iii) panicked and blew themselves up before they reached the target or died during capture, or iv) changed their minds and surrendered to the authorities. Out of the

157 suicide terrorists in our sample, there are 39 failed suicide terrorists: 12 were caught alive and 27 were killed.

## **Terror organizations inflict significant economic harm to the populations they claim to represent**

We combined the data set on suicide terrorists with quarterly data from the Palestinian Labor Force Survey on districts' economic and demographic characteristics. This survey, conducted by the Palestinian Central Bureau of Statistics, provides quarterly information on a rotating representative sample of about 22,000 individuals living in East Jerusalem, the West Bank and the Gaza Strip. We used the survey to obtain the three economic outcomes of interest (unemployment rate, average wage, and percentage of the district's population working in Israel), and also additional districts-level demographic characteristics, which we used as controls in our analysis.

Finally, we combined these two data sets with available data on two Israeli security measures: curfews and Israeli-induced Palestinian fatalities. We controlled for these measures of counterterrorism in our empirical analysis because we are not interested in economic costs that are directly caused by Israeli security policies, but in economic costs of harboring terrorism that are unrelated to Israeli policies.

### **Empirical Strategy**

Our empirical strategy exploits the inherent randomness in the success or failure of suicide terror attacks as a source of exogenous variation to investigate the effects of terrorism on the perpetrators economic conditions. We do so by considering only attacks that were actually initiated (i.e., in which the terrorist was dispatched), and use the exogenous variation in the outcomes of these attacks as our source of identification. We differentiate between two main outcomes: a successfully completed attack (treatment) and attacks in which the terrorist was "caught" by the Israeli Security Agency (control). These are all the relevant cases where the success or failure of the attempted suicide attack was most likely not determined by pre-existing economic conditions.

Thus, our identification relies on the assumption that, even if the initiation of an attack is endogenously determined by economic conditions, conditional on launching an attack, those conditions do not directly affect the success or failure of the operation.<sup>1</sup>

In addition, our econometric strategy can rule out alternative explanations to the observed economic fluctuations. First, by focusing on one particular conflict, our analysis is not affected by the concerns associated with studies based on cross-countries comparisons. Second, we do not focus on *levels*, but rather *changes* of all variables used in the analysis, thus effectively controlling for districts' fixed characteristics that may jointly affect economic conditions and the occurrence of suicide attacks. We also control for changes in districts' demographic characteristics so that our results are not affected by temporary migration of part of the population in the aftermath of a terror attack. Moreover, these economic effects are obtained after controlling for the economic impact of local counter-terrorism measures imposed by the Israeli security forces in the aftermath of an attack. Therefore, we believe that our analysis provides reliable estimates on the economic costs of harboring terrorism.

## Results

Our results show that successful suicide attacks have important economic consequences for the suicide terrorist's district of origin. In particular, a successful attack causes an immediate increase of 5.3 percent in the unemployment rate of an average Palestinian district (relative to the average unemployment rate). Evaluated at an average district, a suicide terrorist that succeed in his or her attack causes an immediate increase on the district's unemployment rate from 9.4 percentage points to up to almost 11 percentage points. In addition, a successful suicide terror attack causes an increase of more than 20 percent in the

likelihood that the district's average wage falls in the quarter following an attack. Finally, a successful attack reduces the number of Palestinians working in Israel by 6.7 percent relative to its mean. Importantly, these economic effects persist for at least six months after the attack.

## **A successful terror attack leads to an increase in unemployment by 5.3%**

The results imply that a successful suicide attack has significant economic consequences to the perpetrating society. These economic costs could be due to a number of mechanisms. Terror attacks may have economic consequences due to security measures that prevent local residents from continuing to work regularly. It is also possible that even if local workers are not prevented from reaching their place of work, employers in Israel may be reluctant to hire workers from a district that launched an attack. Moreover, other researchers have argued that successful attacks may cause the radicalization of the local population (Jaeger et al. 2011; Bueno de Mesquita and Dickson, 2007). The radicalization of the population, in turn, brings about self-deprivation and the de-prioritization of economic achievement, which translate into lacking economic performances (Hillman, 2007).

## Policy recommendations

Our article is the first study to uncover systematic evidence on the economic cost of harboring terrorism. As such, we document an important part of the terrorism equation: while trying to inflict real economic costs on targeted societies, terror organizations also cause significant economic harm to the population that they claim to represent. These findings are important for a variety of reasons. Beyond their direct interpretation, they highlight, for instance, the importance of informing the leaders and the general population of areas harboring terrorism about the extent of the associated costs. This information may dissuade supporters of terror organizations, and strengthen the arguments used by the more moderate voices against terror attacks. While in this study we uncover the costs of harboring terrorism for the average population, an important next step for direct policy recommendations is to disentangle that effect

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<sup>1</sup> Economic conditions can indirectly affect the mission's success. For example, Benmelech et al. (2011) show that dire economic conditions lead to more educated and experienced suicide terrorists. Benmelech and Berrebi (2007) in turn show that more educated and older suicide terrorists are less likely to fail or to be caught.

across different subpopulations. It is crucial to better identify the characteristics of the individuals most harmed by harboring terrorism. These individuals should be the first ones mobilized by policy makers creating a moderate coalition against terrorism.

Our analysis has also indirect implications regarding foreign monetary aid to areas that harbor terrorism. International groups and organizations often claim that the general civilian population of countries harboring terrorism is nothing but another victim of terrorism. This population, living in poor conditions, often relies on terror organizations for the provision of important public goods. In return, they provide safe havens, support, or at least turn a “blind eye” to terror activities. As the claim goes, promoting education and development in these areas will free the civilian population from their reliance on terror organizations and, over time, cause a decrease in the level of violence. Our results call into question the overall effect of foreign aid. While it is desirable to promote education and development of any population, foreign monetary aid to countries harboring terror organizations mitigates the economic costs of terrorism. As such, it dampens the incentives of the general civilian population to mobilize against terror groups that claim to further their political grievances by means of violent methods.

Finally, our findings raise the question of whether or not the deliberate imposition of economic costs is an effective counter-terrorism policy. On the one hand, imposing costs for harboring terrorism may induce the civilian population to stop or weaken support for terror organizations knowing the economic costs to be borne. On the other, however, it may promote radicalization and mobilization for terrorist attacks as a result of worsening economic conditions. Evaluating the costs and benefits of policies along these lines is a very important issue that warrants further research.

### Credits

This EUSECON Policy Briefing was authored by Claude Berrebi and Esteban F. Klor from The Hebrew University of Jerusalem. The views expressed in this briefing are the authors' alone.

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